

## **SUMMARY**

Waste Management consists of the Solid Waste Storage and Disposal, Project Baseline Summary (PBS) WM03, Work Breakdown Structure (WBS) 1.2.1; Solid Waste Treatment, PBS WM04, WBS 1.2.2; Liquid Effluents - 200 Area, PBS WM05, WBS 1.2.3.1; and the Waste Encapsulation and Storage Facility, PBS TP02, WBS 1.4.2.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, and Cost/Schedule Date contained herein is as of January 31, 2000. All other information is as of March 1, 2000.

The Carlsbad Area Office (CAO) audit of Hanford's Transuranic (TRU) Project to meet the requirements of the new Part B Waste Isolation Pilot Plant (WIPP) Resource Conservation and Recovery Act (RCRA) Permit was completed in January. Basic results are that the program is adequate and that implementation is satisfactory and effective. EPA is going to recommend qualification of the Hanford site TRU QA Program. Five Corrective Action Reports (CARs) resulted which are actively being worked with CAO. An additional \$2.5 million of funding from CAO was received at Hanford for TRU shipment.

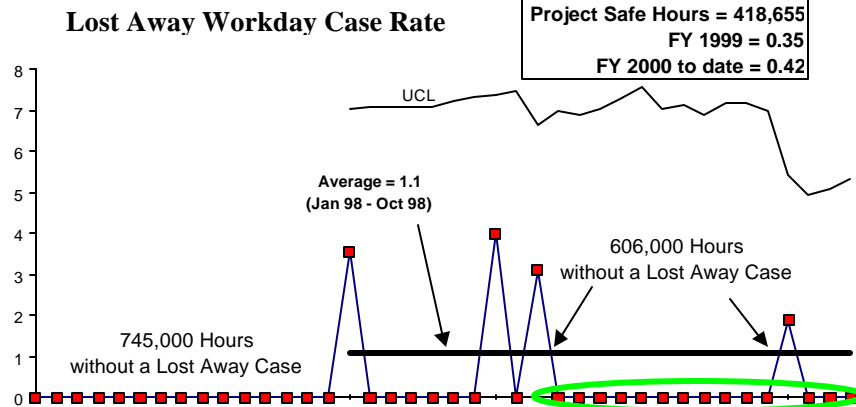
Shipped over 4,000 cubic feet (FYTD) of mixed low-level waste to ATG for non-thermal treatment. ATG completed four (4) macro-encapsulated waste containers to date, and preparations are on schedule to receive the first treated waste shipment into the Mixed Waste Disposal trenches in February.

Milestone performance (EA, DOE-HQ and RL) shows no milestones due this reporting period.

## **ACCOMPLISHMENTS**

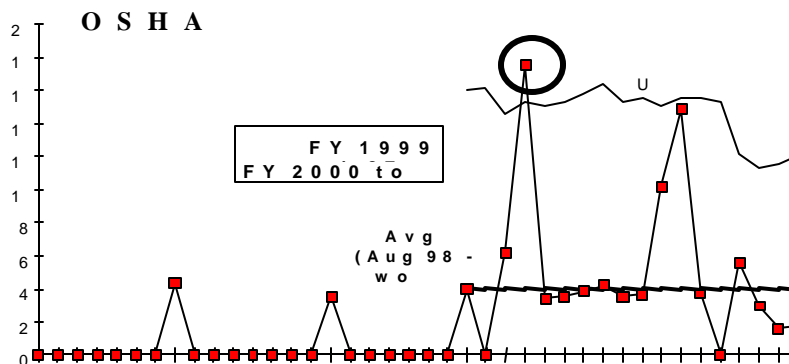
- Disposed 36,400 ft<sup>3</sup> (FYTD) of Low Level Waste (LLW) in the burial grounds, as planned.
- Processed 1.9 million gallons (FYTD) of wastewater through the 200 Effluent Treatment Facility supporting River Protection Project (RPP), ERC 200-UP-1 Groundwater, N-Basin Water, and ERDF Leachate, as planned.
- Completed nondestructive examination (NDE) on 257 drums, radiography on 8 boxes, non-destructive assays of 113 drums, processing of 10 drums through the repackaging/compaction glovebox, and visual examinations of 25 transuranic drums at the Waste Receiving and Processing (WRAP) facility, as planned as of March 1, 2000.
- Shipped over 166 cubic meters (FYTD) of mixed low-level waste (MLLW) to ATG, Inc. (ATG) for non-thermal treatment. ATG completed eleven (11) macro-encapsulated waste containers to date. Three (3) macro-encapsulated waste containers totaling over 8 cubic meters (FYTD) have been received and disposed into the Mixed Waste Disposal unit, and preparations are on schedule to receive an additional 21 cubic meters by February 24, 2000.

## SAFETY



Fourteen of the past 15 months have been a zero, which is a positive trend.

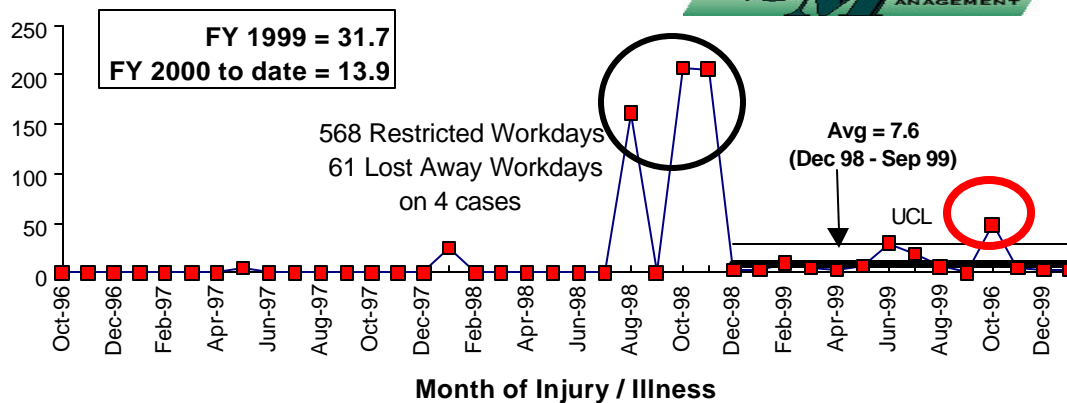
Green



The past three months have been consistently below the baseline averages.

Green

## DOE Safety Cost Index

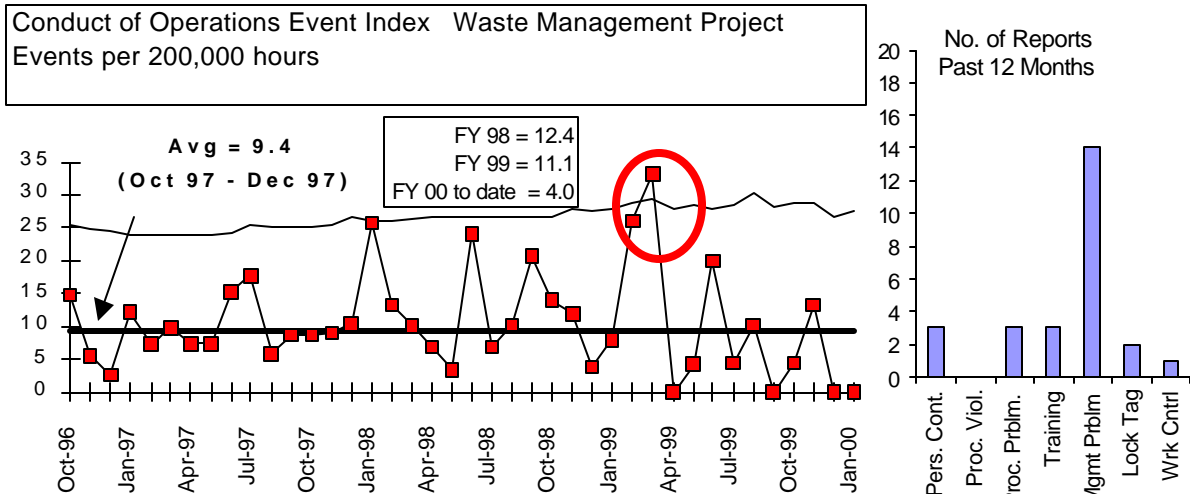


The past three months have been consistently below the baseline averages.

Yellow

## CONDUCT OF OPERATIONS / ISMS STATUS

### CONDUCT OF OPERATIONS



### ISMS STATUS

**Green**

#### Completed activities:

- Established a Waste Management Project/ Analytical Services (WMP/AS) core team in December 1999 to assure the accelerated ISMS integration schedule would be met
- Issued an integrated ISMS program plan in December 1999, setting a path to declaration of readiness
- Drafted systems descriptions of the integrated safety management systems for WMP and AS
- Identified policy and procedure gaps and initiated corrective actions
- Completed first session of ISMS training for all WMP and AS personnel
- Initiated self-assessments of readiness activities

#### Planned actions:

- Issue authorization agreements for Cat 2 nuclear facilities
- Complete self assessment of readiness activities
- Continue management system training
- Declare readiness on April 28, 2000

**Green**

## **BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT**

### **Breakthroughs**

Nothing to report.

### **Opportunities for Improvement**

Nothing to report.

## **UPCOMING ACTIVITIES**

**WIPP Certification and Waste Shipments** -- Discussions are underway to obtain CAO support for the closure audit in the late March time frame. Complete WIPP Certification and initiate TRU shipments in the spring of 2000

**242A Evaporator Operations** -- Conduct 242-A Evaporator Campaign beginning in April 2000

**RH TRU PMP** -- Issue Project Management Plan for RH TRU in June 2000 to meet M-91 milestone (Stretch)

**MLLW Treatment** -- Treat 1,160 cubic meters (includes 100 cubic meters stretch) of MLLW at ATG by August 2000; return Land Disposal Restriction compliant waste for disposal

**Suspect TRU Waste Retrieval** -- Retrieve 400 drums of suspect TRU waste from the Low-Level Burial Grounds by September 2000 (Stretch)

**K Basin Sludge** -- Develop design requirements by September 2000 for acceptance of K Basin sludge at T Plant

**Accident Investigation Report** -- Injured Effluent Treatment Facility employee returned to work on January 10, 2000; the final accident investigation report will be issued in the 2nd Quarter of FY 2000

## **COST PERFORMANCE (\$M):**

	<b>BCWP</b>	<b>ACWP</b>	<b>VARIANCE</b>
<b>Waste Management</b>	\$29.2	\$28.6	+ \$0.6

The \$0.6 million (2 percent) favorable cost variance is within the established threshold. Further information at the PBS level can be found in the following Cost Variance Analysis details.

## **SCHEDULE PERFORMANCE (\$M):**

	<b>BCWP</b>	<b>BCWS</b>	<b>VARIANCE</b>
<b>Waste Management</b>	\$29.2	\$31.9	- \$2.6

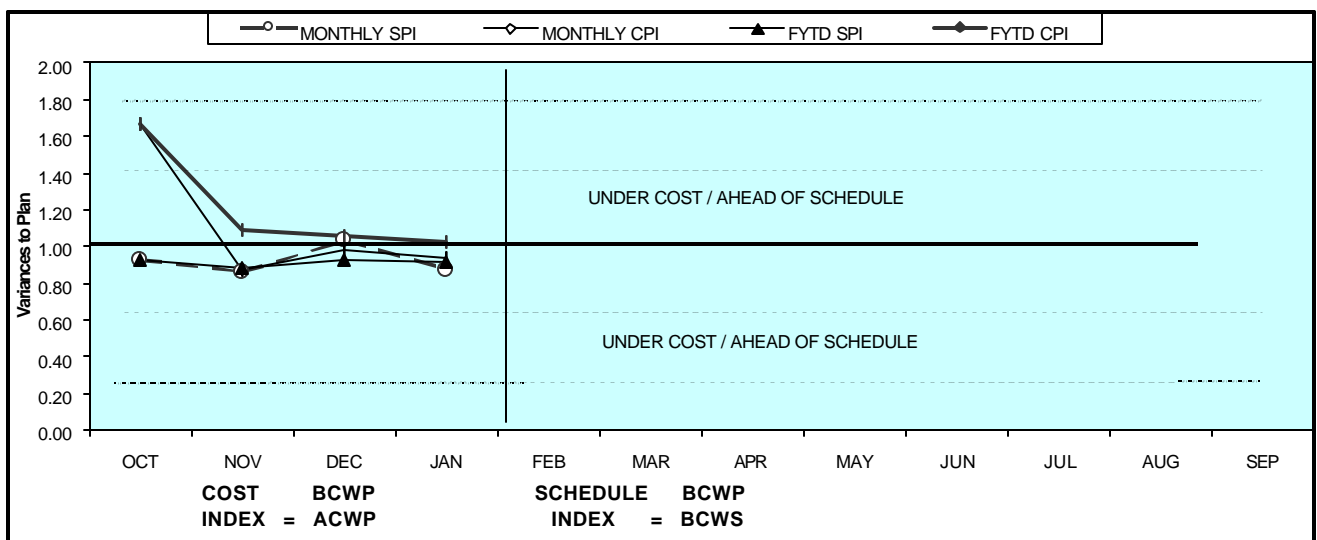
The \$2.6 million (8 percent) unfavorable schedule variance is primarily due to delays in TRU production and MLLW treatment. Further information at the PBS level can be found in the following Schedule Variance Analysis details.

**PHMC Environmental Management Performance Report – March 2000**  
**Section B: 1 – Waste Management**

**FY 2000 Cost/Schedule Performance - All Fund Types**  
**Cumulative to Date Status - (\$000)**

		FYTD								PROJECTED			Rating
		Bv PBS	BCWS	BCWP	ACWP	SV	%	CV	%	BAC	EAC	FUNDING	
WM03	Solid Waste Storage & Disposal	\$ 11,021	\$ 10,843	\$ 10,106	\$ (178)	-2%	\$ 737	7%	\$ 36,028	\$ 32,719	\$ 33,119	Green	
WM04	Solid Waste Treatment	\$ 8,249	\$ 7,003	\$ 7,695	\$ (1,246)	-15%	\$ (692)	-10%	\$ 30,106	\$ 32,297	\$ 32,376	Yellow	
WM05	Liquid Effluents	\$ 8,487	\$ 7,868	\$ 7,135	\$ (619)	-7%	\$ 733	9%	\$ 29,249	\$ 27,807	\$ 27,886	Green	
TP02	WESF	\$ 4,100	\$ 3,516	\$ 3,693	\$ (584)	-14%	\$ (177)	-5%	\$ 13,957	\$ 12,282	\$ 12,282	Green	
Total		\$ 31,857	\$ 29,230	\$ 28,629	\$ (2,627)	-8%	\$ 601	2%	\$ 109,340	\$ 105,105	\$ 105,663	Green	

**WBS 1.2 / 1.4.2**  
**COST/SCHEDULE PERFORMANCE INDICES**  
**(JANUARY 2000 AND FYTD)**



FY 2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.93	0.86	1.03	0.88								
MONTHLY CPI	1.66	0.87	0.98	0.94								
FYTD SPI	0.93	0.89	0.93	0.92								
FYTD CPI	1.66	1.09	1.05	1.02								
MONTHLY BCWS	\$ 6,641	\$ 9,616	\$ 7,269	\$ 8,331								
MONTHLY BCWP	\$ 6,163	\$ 8,277	\$ 7,499	\$ 7,291								
MONTHLY ACWP	\$ 3,703	\$ 9,518	\$ 7,619	\$ 7,789								
FYTD BCWS	\$ 6,641	\$ 16,257	\$ 23,526	\$ 31,857								
FYTD BCWP	\$ 6,163	\$ 14,440	\$ 21,939	\$ 29,230								
FYTD ACWP	\$ 3,703	\$ 13,221	\$ 20,840	\$ 28,629								

**ISSUES**

**Technical Issues**

None.

## **DOE/Regulator/External Issues**

**The Waste Management Programmatic Environmental Impact Statement (PEIS) was issued on February 25, 2000.** The Records of Decision (ROD) for LLW and MLLW will affect Hanford's disposal role for the Complex. The ROD outcomes may have a significant impact on disposal volumes and rates at Hanford.

**Certification of Hanford's TRU Project is necessary to initiate waste shipment to WIPP.** Continue working with the Carlsbad Area Office, the Environmental Protection Agency and the New Mexico Environment Department to achieve WIPP certification of Hanford's TRU Project.

### **Cost Variance Analysis:   (+ \$0.6)**

#### **WBS/PBS**

#### **Title**

##### **1.2.1/WM03**

##### **Solid Waste Storage & Disposal**

**Description/Cause:** The favorable cost variance of \$0.7M (7 percent) is within the established threshold.

**Impact:** No impact.

**Corrective Action:** No corrective action required.

##### **1.2.2/WM04**

##### **Solid Waste Treatment**

**Description/Cause:** The unfavorable cost variance of -\$0.7M (-10 percent) is due to scope being performed under an Advanced Work Authorization (AWA) for T Plant support to accelerated SNF sludge removal. In addition, there are retooling costs caused by the new WIPP permit changes.

**Impact:** No impact.

**Corrective Action:** A BCR will be processed in March for both of these scopes of work.

##### **1.2.3.1/WM05**

##### **Liquid Effluents-200 Area**

**Description/Cause:** The favorable cost variance of \$0.4M (6 percent) is within the established threshold.

**Impact:** No impact.

**Corrective Action:** No corrective action required.

##### **1.4.2/TP02**

##### **WESF**

**Description/Cause:** The unfavorable cost variance of -\$0.2M (-5 percent) is caused by the UT testing and repair of the WESF stack.

**Impact:** No impact.

**Corrective Action:** The Carryover BCR will eliminate the UT testing variance. The stack repair will be managed in the Corrective Maintenance budget.

## Schedule Variance Analysis: (- \$2.6)

### **WBS/PBS**

### **Title**

#### **1.2.1/ WM03**

#### **Solid Waste Storage & Disposal**

**Description /Cause:** The unfavorable schedule variance of -\$0.2M (-2% percent) is within the established threshold.

**Impact:** No Impact.

**Corrective Action:** No corrective action required.

#### **1.2.2/ WM04**

#### **Solid Waste Treatment**

**Description /Cause:** The unfavorable schedule variance of -\$1.2M (-15% percent) is due to the delay in TRU production and shipments, which is a result of WIPP permit changes and re-certification. MLLW treatment is behind schedule due to ATG not completing construction on their facility as scheduled.

**Impact:** No Impact.

**Corrective Action:** ATG processing began in late December, 1999. The schedule will be recovered. TRU production is in the process of rebaselining to resolve WIPP certification audit comments and reworking the shipment schedule.

#### **1.2.3.1/ WM05**

#### **Liquid Effluents-200 Area**

**Description /Cause:** The unfavorable schedule variance of -\$0.6M (-9% percent) is due to ETF not operating as planned in January due to groundwater receipt ceasing.

**Impact:** No Impact.

**Corrective Action:** The production schedule is being evaluated to determine run scenarios and impacts for the remainder of the year.

#### **4.2.1/ TP02**

#### **WESF**

**Description /Cause:** The unfavorable schedule variance of -\$0.6M (-14% percent) is due to the deferral of the FSAR to FY 2002 to resolve DOE funding reductions.

**Impact:** No Impact.

**Corrective Action:** A BCR has been submitted to defer the FSAR.

<b>Baseline Change Requests Currently in Process</b>									
<b>(\$000)</b>									
PROJECT CHANGE NUMBER	DATE ORIGIN	BCR TITLE	FY00 COST IMPACT \$000	SCH	TECH	DATE TO CCB	CCB APR'VD	RL APR'VD	CURRENT STATUS
WM-2000-002	1/5/00	WMP FY 00 Mandated Funds Reduction	-\$3,042			2/17/00			On Hold
FSP-2000-007	12/2/99	WESF Carryover	\$160			1/14/00	1/14/00	2/11/00	Approved
FSP-2000-018	1/25/00	WESF FY 00 Mandated Funds Reduction	-\$1,100			2/29/00	2/29/00		At DOE-RL
WM-2000-003	2/8/00	T-Plant Canyon Cleanoff/Fuel removal	\$3,952						In draft
WM-2000-004	3/1/00	WM Stretch Goals	\$0						In draft
<b>ADVANCE WORK AUTHORIZATIONS</b>									
AWA	2/24/00	T-Plant Canyon Cleanoff/Fuel removal	\$1,150					2/24/00	Scope Acceleration
AWA	2/25/00	TRU Retrieval	\$165					2/25/00	Scope Acceleration

## WASTE MANAGEMENT – WBS 1.2

### MILESTONE ACHIEVEMENT

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2000
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	0	0	0	0	0	2	0	2
DOE-HQ	0	0	0	0	0	0	0	0
RL	0	0	0	0	0	9	0	9
<b>Total Project</b>	0	0	0	0	0	11	0	11

Tri-Party Agreement / EA Milestones
M-91-03 (WMH-00-001, "Issue TRU/TRUM Waste PMP", due 06/30/00 — On schedule (stretch)
M-91-04 (A2J-00-001), "Complete Construction of CH TRU/TRUM Retrieval Facility", due 09/29/00 — Submitted letter to RL on October 28, 1999 documenting that retrieval was initiated and will proceed without construction of Project W-113 facilities. Recommended to RL to notify EPA and Ecology of the completion of interim milestone M-91-04 and to discuss M-91-07 issues.
DNFSB Commitments

Nothing to report

## MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Baseline Milestone Title</u>	<u>Forecast Date</u>
<u>Date</u>			

**OVERDUE – 0**

**FORECAST LATE – 0**

**FY 1999 OVERDUE – 1**

TRP-98-709	RL	Complete Hot Cell Deactivation	03/31/99	06/30/00
1.4.2		WESF Facility (A-E)		

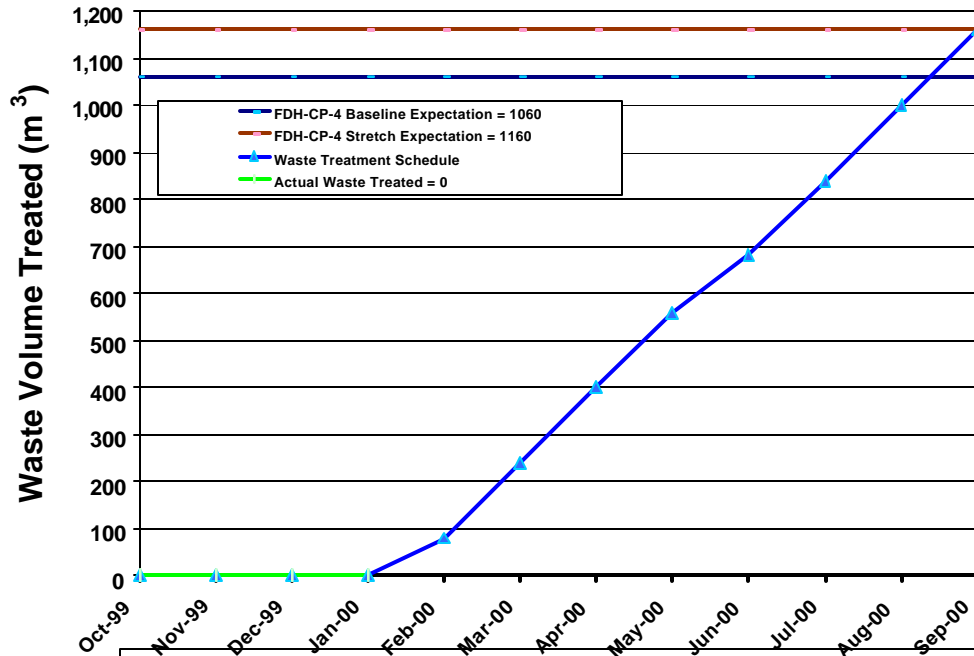
**Cause:** This milestone is not complete due to not being supported at the current funding level.

**Impact:** No overall impact is expected.

**Corrective Action:** Awaiting determination of funding source.



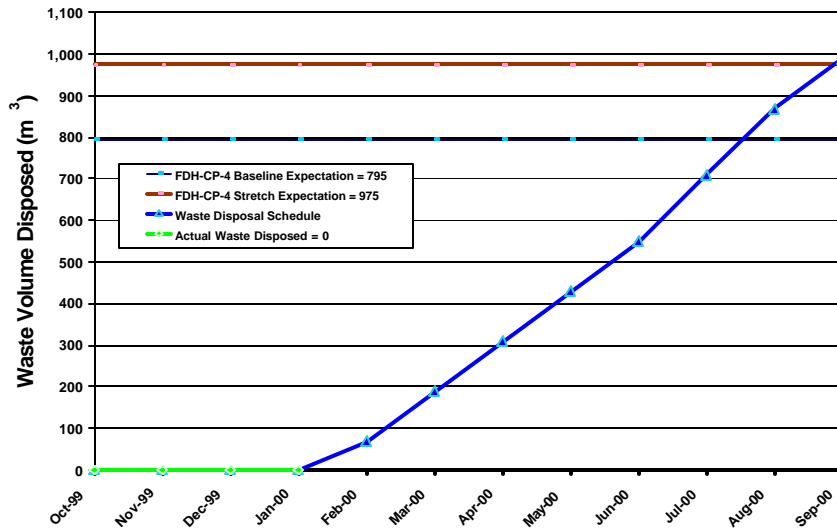
## PERFORMANCE OBJECTIVES MLLW Treatment



Action Plans: On track to meet stretch expectation.

Green

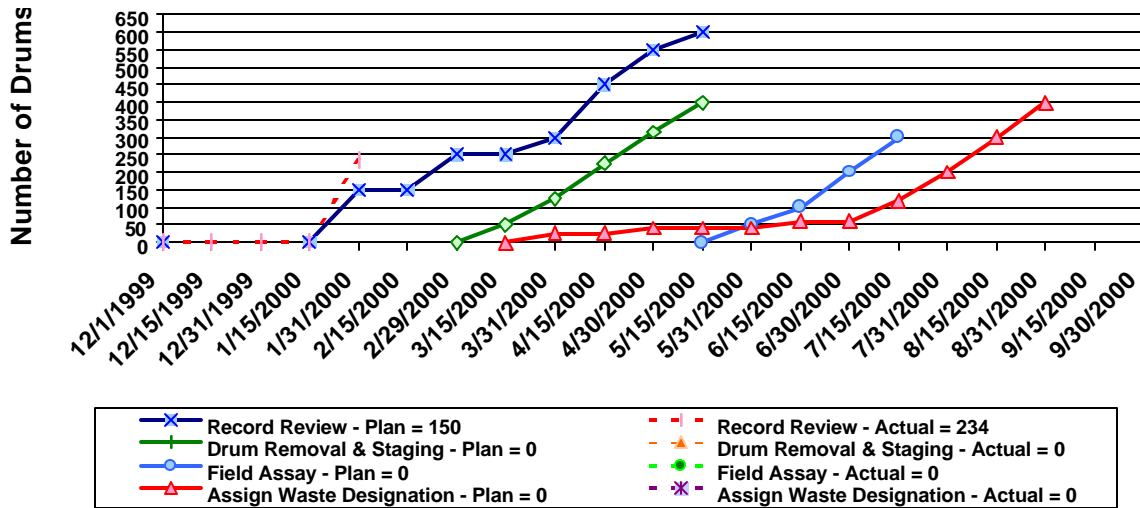
## MLLW Disposal



Action Plans: On track to meet stretch expectation.

Green

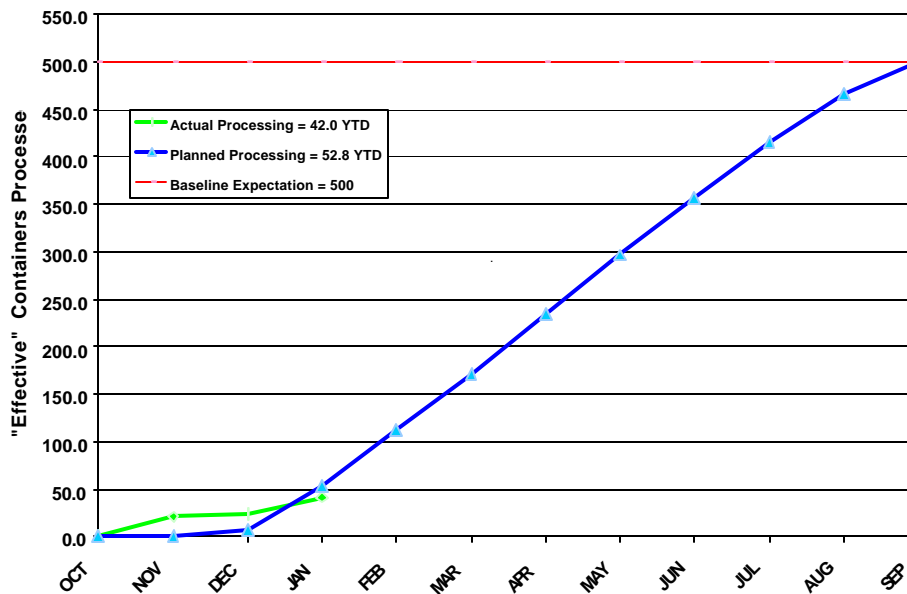
## TRU Retrieval



**Action Plans:** On track. Completed 234 document reviews in January. Field retrieval activities planned to start in March with planned completion in mid-May.

**Green**

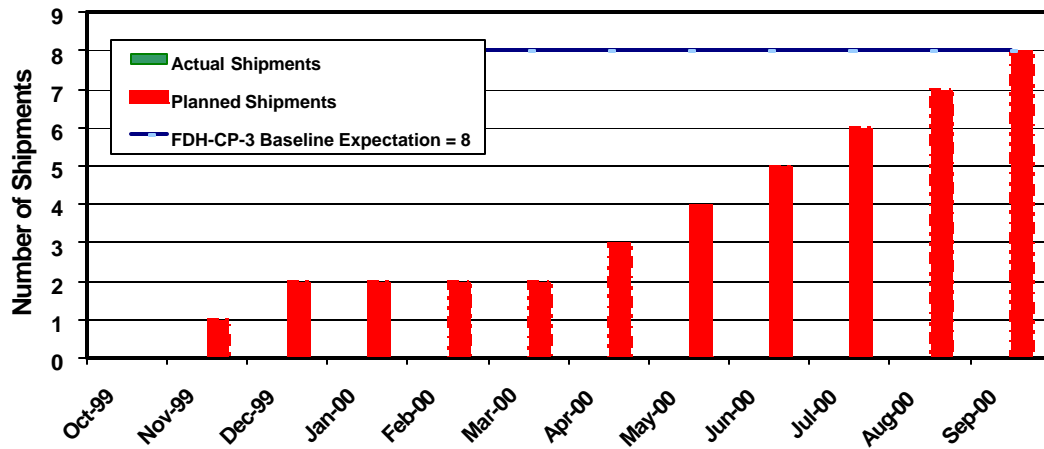
## TRU Container Processing



**Action Plans:** On track to meet the baseline expectation.

**Green**

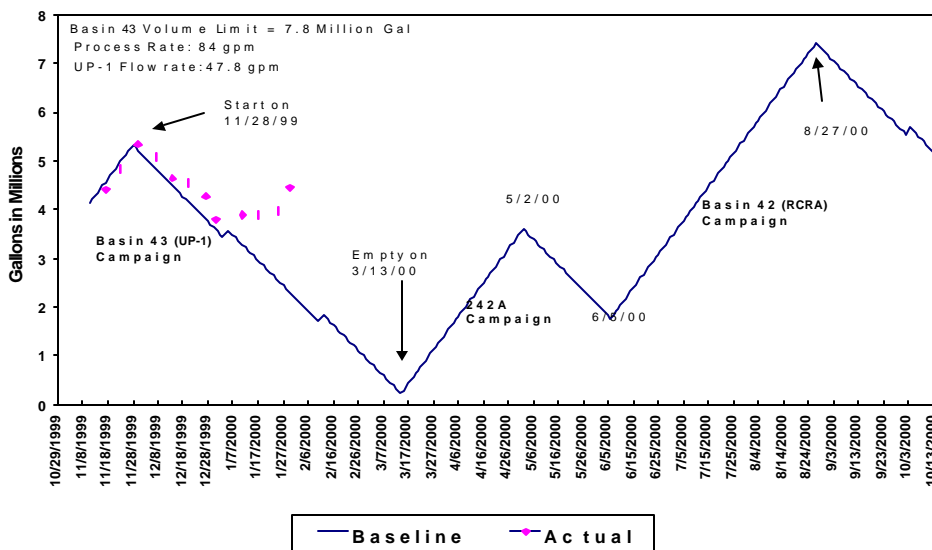
## TRU Shipments



**Action Plans:** Change/Negotiation required based on pending CAO WIPP Certification audit results. Initial shipment delayed until spring 2000.

**Yellow**

## Liquid Waste Processing



**Action Plans:** BHI shut down 200-UP-1 groundwater on 12/27/99 and restarted on 1/26/00. Plant was shut down during January for maintenance and will start up to work the 200-UP-1 inventory back down.

**Green**

## **KEY INTEGRATION ACTIVITIES**

- Representatives from DOE- RL, -Oakland, and -Ohio met at Hanford to discuss inter-site transfer of TRU waste from three DOE small quantity site generators and to develop preliminary plans for disposition of these wastes
- Develop design requirements by September 2000 for acceptance of K Basin sludge at T Plant
- Support River Corridor Project in cleanup and removal of waste from 324 and 327 buildings
- Issuance of Records of Decision for LLW and MLLW is expected to affect Hanford's role in disposing of waste from other sites. DOE's preferred alternative for LLW and MLLW disposal is to establish regional LLW disposal and MLLW disposal operations at two DOE sites; Hanford and NTS
- Support DOE-RL declaration of Readiness-to-Proceed in support of the ORP Privatization contract, specifically in the areas of liquid effluent and solid waste
- Support BHI by treating 200-UP-1 groundwater and ERDF leachate at the 200 Area ETF